2009 Model Construction Codes: Review & Analysis Update

City Council Workshop April 13, 2010

Construction Codes Background

- "Model" codes used in Wichita 60+ yrs.
- Since 1950's, "model" code editions updated triennially, and locally reviewed/adopted (with local amendments)
- Late 1990's: 2 of 3 national model code groups combined to form International Code Council (ICC)
- Year 2000 ICC published International family of building, fire & trade codes
- 3rd model code group, ICBO ("Uniform" codes) split from ICC effort in late '90's; ICBO continues triennial publication of Uniform plumbing & mechanical codes

Construction Codes Background

- Early 2002: 2000 editions of International Building, Residential, Fire & Mechanical Codes adopted; 2000 edition of Uniform Plumbing Code adopted
 - Wichita uses National Electrical Code (NEC), published on a different 3-year cycle than other model codes (currently under 2008 edition)
- Adoption of 2000 model codes was delayed;2003 model code editions not reviewed/adopted
- Early 2007 City adopted 2006 editions of International Building, Residential & Mechanical Codes, but retained 2000 International Fire Code & 2000 Uniform Plumbing Code.

2009 Model Code Review Process

- Late spring '09 staff assembled stakeholder code review committees (with building/trade board input)
 - 2009 plumbing code review initiated in 2010 (UPC & IPC)
- Between 10/09 01/10, presentations on proposed 2009 code adoption packages made to building/trade groups for additional input
- 11/09 3/10: Presentations on changes between 2006
 2009 IBC, IRC & IFC, and proposed adoption
 packages made to BCSA & Mechanical Board

2009 IRC Residential Fire Sprinklering

- 12/09 3/10 WFD/OCI met with local homebuilders to further discuss 2009 IRC residential fire sprinkler requirements for new 1-4 family homes (and possible construction alternatives in lieu of fire sprinklering)
 - WFD/OCI agreed to recommend deletion of 1 & 2 family fire sprinklering requirements from 2009 IRC & IFC; over next 12-15 months, WFD would work with homebuilders, others to conduct further analysis, provide additional data & more fully respond to concerns
 - After further analysis, WFD/OCI indicated fire sprinklering may be recommended, by separate ordinance action, by early – mid 2011)

2009 Codes - BCSA Recommendations

- 3/1/10 BCSA recommended (7-0) that City <u>NOT</u> move forward with adoption of 2009 IBC, IFC & IRC; BCSA further recommended:
 - completion of proposed amendments to model Fire & Plumbing Codes in order to adopt 2006 model code editions (now under 2000 IFC & 2000 UPC); and
 - possible adoption of many currently proposed IBC & IRC local amendments, but with currently adopted
 2006 model codes as base

2009 Codes - BCSA Recommendations

- During 2/1 and 3/1/10 BCSA meetings, local homebuilders (WABA) made these points:
 - adoption of 2009 IRC makes homebuilders uneasy, even if ordinance <u>DELETES</u> requirement for fire sprinklers in 1 & 2 family dwellings (especially since staff leaves open the possibility of fire sprinkler requirements, with Council approval, within 12-15 months);
 - due primarily to 2009 IRC requirement for fire sprinklers, many area jurisdiction code officials, including Sedgwick Co., have recently elected to maintain 2006 code editions (some indicating they want to maintain a "competitive edge" in encouraging new home building in a tough economy); and
 - Wichita should stay with 2006 code editions to maintain a "regional" set of codes

2009 Codes - BCSA Recommendations

- During 2/1 and 3/1/10 BCSA meetings, staff made the following points:
 - ordinance deletes requirement for fire sprinklers in new 1 & 2 family dwellings, & provides alternative fire wall construction standards in lieu of fire-sprinklering for attached townhomes;
 - many new alternate design provisions in 2009 IBC & IMC, generally seen as favorable to designers, owners & contractors;
 - many commercial projects are designed/submitted by national companies, which usually design to current model code editions; and
 - over past 15-20 years, Wichita has taken regional lead in code cycle review/adoption, inviting other jurisdictions to participate in review and & proposed adoption package development process

2009 Codes — Mechanical & Plumbing Board Recommendations

- 12/09 Mechanical Board recommended that Council pass proposed ordinance adopting 2009 IMC & 2009 IRC mechanical chapters, with local amendments
- Per Council direction in late fall 2009 & early 2010, Plumbing Board began review & comparison of the 2009 UPC & IPC; Plumbing Board is hoping for additional direction from Council as it moves forward

Highlights of Key Changes Between 2006 & 2009 Model Codes

- IBC (other than 1 & 2 family construction/remodeling)
 - Additional design alternatives for many types of construction/building uses (generally, designers & commercial builders find these to be favorable)
 - Clarifications & new options for various egress, egress hardware & accessibility requirements
 - Modified requirements for 3rd party special inspections
- IRC (1 & 2 family construction/remodeling)
 - Requirement for fire sprinklers in new 1 & 2 family homes & attached townhomes
 - Greatly increased design & installation requirements for deck construction

Highlights of Key Changes Between 2006 & 2009 Model Codes

IFC

- Requirement for fire sprinklers in new 1 & 2 family homes
- Open burning regulations
- Propane tank storage in heavily populated areas

IMC

- Thermal barrier requirements for hydronic piping (open & under slab)
- New dryer vent requirements
- Revised joint & seam requirements for duct systems (2009)
 IMC/IRC now matches prior local amendments)

Additional Considerations

- H.B. 2472 Kansas Uniform Common Interest Owners Bill of Rights Act, passed by both House and Senate on 3/30/10, prohibits local jurisdictions from adopting fire sprinkler requirements in 1 & 2 family dwellings, but sunsets by 7/1/11
- Existing State statute gives KS Dept. of Education broad authority to regulate code review/approval of school construction/remodeling projects
 - KSDE currently requires use of International Codes, including IPC, and NEC for design of school projects, although pending legislation may redirect authority to State Fire Marshal's Office

Code Adoption Options

- Adopt 2009 model codes (IBC, IFC & IRC), as proposed to BCSA on 3/1/10, which eliminate fire sprinklers for new 1 & 2 family homes, and for new 3-4 family attached dwellings if upgraded fire walls are installed between units
- Retain current 2006 model code editions of IBC, IRC & IMC, but adopt 2006 editions of IFC & model plumbing code (currently under 2000 IFC & 2000 UPC); consider adoption of certain proposed local amendments to IBC, IRC & IMC, as well as certain favorable provisions from 2009 IBC & IRC
- Adopt 2009 IBC & IFC, and possibly the 2009 IMC for commercial, while retaining 2006 IRC with 2006 IMC residential provisions

Wrap-Up

- Additional questions
- Council guidance/direction